

## CLAIMS

1. A synchronous pump structure, particularly an immersion pump (1) equipped with a float control device (3) and comprising a synchronous electric motor (2) with a permanent-magnet rotor (8), characterised in that the float (16) of said control device (3) is incorporated in an envelope (11), externally associated with the body (15) of the pump (1), and a sensor element (4) of said control device (3) is housed in the pump body (15) in correspondence with said float (16).  
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2. A pump structure according to claim 1, characterised in that said sensor element is a level sensor (4) of the Hall-effect magnetic type.  
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3. A pump structure according to claim 1, characterised in that said float (16) is equipped in its lower part with a permanent magnet (19).
4. A pump structure according to claim 1, characterised in that said envelope (11) comprises a cylindrical-cup-shaped base portion (13) and a lid (20) defining with said base portion (13) a closed chamber.  
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5. A pump structure according to claim 4, characterised in that the lid (20) comprises a knob (22) which can be handled by a user to adjust the position of the float (16) on the horizontal plane.
6. A pump structure according to claim 2, characterised in that said Hall effect sensor (4) comprises a probe (27) mounted on an electronic board housed in the pump body (15) in a position underlying the float (16).  
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7. A pump structure according to claim 4, characterised in that said base portion (13) has a side wall (23) equipped with a grate (29) to put the internal part of the envelope (11) in fluid communication with the external environment.  
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8. A pump structure according to claim 7, characterised in that internally, close to that side portion (23), a semi-cylinder-shaped filter element (14) is provided.
9. A pump structure according to claim 8, wherein said filter (14) is kept in position by two opposite bulkheads (24, 30) partially projecting towards  
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the internal part of the envelope (11).

10. A pump structure according to claim 2, wherein the position of the float (16) can be manually adjusted in order to be misaligned with respect to said sensor element (4).